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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled)

2. (Currently Amended) In an artificial limb for amputees who have a residual limb, the artificial limb having a pylon, a socket attached to the pylon, a flexible liner having a cavity with a volume less than that of the residual limb, the socket having a volume and shape to receive a substantial portion of the residual limb and the liner, the socket having a cavity between the liner and the socket adapted to receive the residual limb and the liner, a vacuum source connectable to the socket cavity, and a seal means for sealing the socket cavity: a valveless plate/socket attachment for connecting the vacuum source to the socket cavity, the plate/socket attachment comprising:

a) a plate attached to the pylon and to the socket, the plate having a first surface and a second surface;

b) a vacuum passage through the plate between the first surface and the second surface; and

c) a vacuum outlet in the second surface for attachment of the vacuum source;

d) the artificial limb having an inner socket disposed between the residual limb and the socket, the socket cavity being between the liner and the inner socket, and further comprising a shuttle pin receiver in the first surface a mechanical interlock connected between the plate/socket attachment and the inner socket and, the shuttle pin receiver being connected to the vacuum passage, and an O-ring a seal between the shuttle pin receiver mechanical interlock and the vacuum passage; and a shuttle pin attached to the inner socket and removably connectable to the shuttle pin receiver to connect the inner socket to the plate/socket attachment, the shuttle pin mechanical interlock having a second vacuum passage therethrough, the second vacuum passage being connected to the socket cavity, the

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~~shuttle pin~~ the mechanical interlock engaging the ~~O-ring~~ seal thereby providing an air-tight connection between the vacuum passage and the second vacuum passage.

3. (Currently Amended) The plate/socket attachment of claim 21, wherein a vacuum of at least ten inches of mercury below ambient is maintained in the cavity.
4. (Cancelled)
5. (Currently Amended) The apparatus of claim 21, wherein the seal means further comprises a nonfoamed, nonporous polyurethane suspension sleeve for rolling over and covering the socket and a portion of the residual limb.
6. (Currently Amended) The apparatus of claim 21, wherein the liner is of a nonfoamed, nonporous polyurethane.
7. (Currently Amended) The apparatus of claim 21, wherein the seal means further comprises an annular seal between the liner and the socket.
8. (Currently Amended) The apparatus of claim 21, wherein the vacuum source is a vacuum pump and a regulator to maintain vacuum in the cavity, and further comprising a power source for the vacuum pump and the regulator.
9. (Currently Amended) The apparatus of claim 21, further comprising a vacuum reservoir having a volume substantially larger than the cavity.
10. (Currently Amended) The apparatus of claim 21, wherein the vacuum source further comprises a weight-actuated vacuum pump.
11. (Currently Amended) The apparatus of claim 21, further comprising a thin sheath between the liner and the socket, to assist the even distribution of vacuum in the cavity about the liner.
12. (Currently Amended) The apparatus of claim 2, further comprising ~~a thin sheath between the liner and the socket, to assist the even distribution of vacuum in the cavity about the liner~~ a retention member for releasably locking the mechanical interlock.
13. (Currently Amended) The apparatus of claim 212, the retention member ~~further comprising a retention member being~~ within the ~~shuttle pin receiver~~ plate/socket attachment biased against the ~~shuttle pin mechanical interlock~~ at an acute angle to a longitudinal axis of the ~~shuttle pin mechanical interlock~~, and further comprising a retention member spring

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biasing the retention member, and a release member engaging the retention member and moving the retention member to a position substantially perpendicular to the longitudinal axis of the ~~shuttle pin~~ mechanical interlock.

14. (Original) In an artificial limb for amputees who have a residual limb, the artificial limb having a pylon, a socket attached to the pylon, a flexible liner having a cavity with a volume less than that of the residual limb, the socket having a volume and shape to receive a substantial portion of the residual limb and the liner, the socket having a cavity between the liner and the socket adapted to receive the residual limb and the liner, a vacuum source connectable to the socket cavity, and a seal means for sealing the socket cavity: a valveless plate/socket attachment for connecting the vacuum source to the socket cavity, the plate/socket attachment comprising:

- a) a plate attached to the pylon and to the socket, the plate having a first surface and a second surface;
- b) a vacuum passage through the plate between the first surface and the second surface;
- c) a vacuum outlet in the second surface for attachment of the vacuum source;
- d) the artificial limb having an inner socket disposed between the residual limb and the socket, the socket cavity being between the liner and the inner socket, and further comprising a shuttle pin receiver in the first surface, the shuttle pin receiver being connected to the vacuum passage, and an O-ring between the shuttle pin receiver and the vacuum passage; and a shuttle pin attached to the inner socket and removably connectable to the shuttle pin receiver to connect the inner socket to the plate/socket attachment, the shuttle pin having a second vacuum passage therethrough, the second vacuum passage being connected to the socket cavity, the shuttle pin engaging the O-ring thereby providing an air-tight connection between the vacuum passage and the second vacuum passage.

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15. (Original) The apparatus of claim 14, further comprising: a retention member within the shuttle pin receiver biased against the shuttle pin at an acute angle to a longitudinal axis of the shuttle pin, a retention member spring biasing the retention member, a release member engaging the retention member and moving the retention member to a position substantially perpendicular to the longitudinal axis of the shuttle pin, and a retention member spring biasing the retention member.

16. (New) The plate/socket attachment of claim 2, the mechanical interlock being in the first surface and removably connecting the plate/socket attachment to the inner socket, and the second vacuum passage being connected to the socket cavity.

17. (New) The plate/socket attachment of claim 16, wherein the mechanical interlock comprises a shuttle pin attached to the inner socket and removably connectable to a shuttle pin receiver in the first surface.

18. (New) The plate/socket attachment of claim 2, wherein the seal comprises an O-ring.